AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims:

1. (Currently Amended) A method of increasing the conductivity of a fracture in a subterranean formation comprising the steps of:

providing a fracturing treatment fluid comprising a proppant composition, the proppant composition comprising proppant particulates and a degradable material ~~capable of undergoing an irreversible degradation downhole~~ that comprises one or more poly(orthoesters);

introducing the proppant composition to the fracture; and

allowing the proppant composition to form a proppant matrix having voids in the fracture.

2. (Currently Amended) The method of claim 1 wherein the proppant particulates ~~comprise~~ are selected from the group consisting of sand, walnut hulls, ~~or~~ man-made proppant particulates, and combinations thereof.

3. (Previously Presented) The method of claim 1 wherein the proppant particulates have a size of about 10 to about 60 US mesh.

4. (Original) The method of claim 1 wherein the proppant composition further comprises a curable resin, a tackifying agent, or both.

5. (Currently Amended) The method of claim 4 wherein the curable resin ~~comprises an epoxy, furan, phenolic, furfuryl aldehyde, or furfuryl alcohol resin~~ is selected from the group consisting of epoxies, furans, phenolics, furfuryl aldehydes, furfuryl alcohols, and combinations thereof.

6. (Previously Presented) The method of claim 1 wherein the proppant composition comprises interlocking proppant particulates.

7. (Currently Amended) The method of claim 1 wherein the degradable material further comprises a degradable polymer or a dehydrated salt.

8. (Currently Amended) The method of claim 7 wherein the degradable polymer comprises a second degradable material selected from the group consisting of polysaccharides, chitins, chitosans, proteins, aliphatic polyesters, poly(lactides), poly(glycolides), poly(ε-caprolactones), poly(hydroxybutyrates), polyanhydrides, aliphatic polycarbonates, poly(amino

acids), poly(ethylene oxides), polyphosphazenes, and combinations thereof ~~a polysaccaride, a chitin, a chitosan, a protein, an aliphatic polyester, a poly(lactide), a poly(glycolide), a poly(ε-caprolactone), a poly(hydroxybutyrate), a polyanhydride, an aliphatic polycarbonate, a poly(orthoester), a poly(amino acid), a poly(ethylene oxide), or a polyphosphazene~~.

9. (Original) The method of claim 1 wherein the degradable material further comprises a plasticizer.

10. (Original) The method of claim 7 wherein the dehydrated salt comprises anhydrous sodium tetraborate or anhydrous boric acid.

11. (Currently Amended) The method of claim 1 wherein the degradable material further comprises poly(lactic acid) and a compound chosen from the group consisting of sodium borate and boric oxide.

12. (Currently Amended) The method of claim 1 wherein the degradable material further comprises a stereoisomer of a poly(lactide).

13. (Previously Presented) The method of claim 1 wherein the proppant composition comprises a poly(lactic acid) degradable material and bauxite proppant particulates, the bauxite proppant particulates at least partially coated with a curable epoxy resin.

14. (Original) The method of claim 1 wherein the degradable material is present in the proppant composition in an amount sufficient to create a desirable number of voids in the proppant matrix.

15. (Original) The method of claim 1 wherein the degradable material is present in the proppant composition in an amount of about 0.1% to about 30% by weight of proppant particulates in the composition.

16. (Currently Amended) The method of claim 1 wherein the degradable material further comprises particles having a rod-like shape.

17. (Currently Amended) The method of claim 1 wherein the degradable material further comprises an inorganic or organic compound.

18. (Currently Amended) The method of claim 17 wherein the inorganic or organic compound ~~comprises~~ is selected from the group consisting of sodium acetate trihydrate, L-tartaric acid disodium, salt dihydrate, sodium citrate dihydrate, hydrate of an inorganic acid, hydrate of an inorganic acid salt, sodium tetraborate decahydrate, sodium hydrogenphosphate

heptahydrate, sodium phosphate, dodecahydrate, amylose, starch-based hydrophilic ~~polymer~~polymers, ~~or a~~ cellulose-based hydrophilic ~~polymer~~polymers, and combinations thereof.

19. (Original) The method of claim 1 wherein the degradable material is a composite.

20. (Currently Amended) A method of enhancing the permeability of a proppant matrix comprising the step of introducing a plurality of voids into the proppant matrix by a degradation of a degradable material that comprises one or more poly(orthoesters) within the proppant matrix.

21. (Currently Amended) The method of claim 20 wherein the proppant matrix comprises a material selected from the group consisting of sand, walnut hulls, ~~or~~ man-made proppant particulates, and combinations thereof.

22. (Original) The method of claim 20 wherein the proppant matrix comprises a curable resin, a tackifying agent, or both.

23. (Currently Amended) The method of claim 22 wherein the curable resin ~~comprises an epoxy, furan, phenolic, furfuryl aldehyde, or furfuryl alcohol resin~~ is selected from the group consisting of epoxies, furans, phenolics, furfuryl aldehydes, furfuryl alcohols, and combinations thereof.

24. (Original) The method of claim 20 wherein the proppant matrix comprises interlocking proppant particulates.

25. (Currently Amended) The method of claim 20 wherein the degradable material further comprises a degradable polymer or a dehydrated salt.

26. (Currently Amended) The method of claim 25 wherein the degradable polymer ~~comprises~~ is selected from the group consisting of polysaccharides, chitins, chitosans, proteins, aliphatic polyesters, poly(lactides), poly(glycolides), poly(ε-caprolactones), poly(hydroxybutyrates), polyanhydrides, aliphatic polycarbonates, poly(amino acids), poly(ethylene oxides), polyphosphazenes, and combinations thereof ~~a polysaccharide, a chitin, a chitosan, a protein, an aliphatic polyester, a poly(lactide), a poly(glycolide), a poly(ε-caprolactone), a poly(hydroxybutyrate), a polyanhydride, an aliphatic polycarbonate, a poly(orthoester), a poly(amino acid), a poly(ethylene oxide), or a polyphosphazene~~.

27. (Original) The method of claim 20 wherein the degradable material further comprises a plasticizer.

28. (Currently Amended) The method of claim 25 wherein the dehydrated salt ~~comprises~~ is selected from the group consisting of anhydrous sodium tetraborate, ~~or~~ anhydrous boric acid, and combinations thereof.

29. (Currently Amended) The method of claim 20 wherein the degradable material further comprises poly(lactic acid) and a compound chosen from the group consisting of sodium borate and boric oxide.

30. (Currently Amended) The method of claim 20 wherein the degradable material further comprises a stereoisomer of a poly(lactide).

31. (Currently Amended) The method of claim 20 wherein the proppant matrix comprises a poly(lactic acid) degradable material and bauxite proppant particulates, the bauxite proppant particulates being at least partially coated with a curable epoxy resin.

32. (Original) The method of claim 20 wherein the degradable material is present in the proppant matrix in an amount sufficient to create a desirable number of voids in the proppant matrix.

33. (Currently Amended) The method of claim 20 wherein the degradable material is present in the proppant matrix ~~composition~~ in an amount of about 0.1% to about 30% by weight of the proppant matrix ~~particulates in the composition~~.

34. (Original) The method of claim 20 wherein the degradable material comprises particles having a rod-like shape.

35. (Currently Amended) The method of claim 20 wherein ~~the~~ at least a portion of the voids in the proppant matrix are channel-like in shape.

36. (Original) The method of claim 20 wherein the proppant matrix has a conductivity equal to or greater than 4500 darcies at a pressure of about 2000 psi.

37. (Original) The method of claim 20 wherein the proppant matrix has a conductivity equal to or greater than 4500 darcies at a pressure of about 4000 psi.

38. (Original) The method of claim 20 wherein the proppant matrix has a conductivity equal to or greater than 4000 darcies at a pressure of about 6000 psi.

39. - 72. (Cancelled)

73. (New) A method of increasing the conductivity of a fracture in a subterranean formation comprising the steps of:

providing a fracturing treatment fluid comprising a proppant composition, the proppant composition comprising proppant particulates and a degradable composite material;

introducing the proppant composition to the fracture; and

allowing the proppant composition to form in the fracture a proppant matrix having voids.

74. (New) The method of claim 73 wherein the proppant particulates are selected from the group consisting of sand, walnut hulls, man-made proppant particulates, and combinations thereof.

75. (New) The method of claim 73 wherein the proppant particulates have a size of about 10 to about 60 US mesh.

76. (New) The method of claim 73 wherein the proppant composition further comprises a curable resin, a tackifying agent, or both.

77. (New) The method of claim 76 wherein the curable resin is selected from the group consisting of epoxies, furans, phenolics, furfuryl aldehydes, furfuryl alcohols, and combinations thereof.

78. (New) The method of claim 73 wherein the proppant composition comprises interlocking proppant particulates.

79. (New) The method of claim 73 wherein the degradable composite material further comprises a degradable polymer or a dehydrated salt.

80. (New) The method of claim 79 wherein the degradable polymer is selected from the group consisting of polysaccharides, chitins, chitosans, proteins, aliphatic polyesters, poly(lactides), poly(glycolides), poly(ε-caprolactones), poly(hydroxybutyrates), polyanhydrides, aliphatic polycarbonates, poly(amino acids), poly(ethylene oxides), polyphosphazenes, and combinations thereof.

81. (New) The method of claim 79 wherein the dehydrated salt is selected from the group consisting of anhydrous sodium tetraborate or anhydrous boric acid, and combinations thereof.

82. (New) The method of claim 73 wherein the degradable composite material further comprises poly(lactic acid) and a compound chosen from the group consisting of sodium borate and boric oxide.

83. (New) The method of claim 73 wherein the degradable composite material further comprises a stereoisomer of a poly(lactide).

84. (New) The method of claim 73 wherein the proppant composition comprises a poly(lactic acid) degradable material and bauxite proppant particulates, the bauxite proppant particulates being at least partially coated with a curable epoxy resin.

85. (New) The method of claim 73 wherein the degradable composite material is present in the proppant composition in an amount sufficient to create a desirable number of voids in the proppant matrix.

86. (New) The method of claim 73 wherein the degradable composite material is present in the proppant composition in an amount of about 0.1% to about 30% by weight of proppant particulates in the composition.

87. (New) The method of claim 73 wherein the degradable composite material further comprises particles having a rod-like shape.

88. (New) The method of claim 73 wherein the degradable composite material further comprises an inorganic or organic compound.

89. (New) The method of claim 88 wherein the inorganic or organic compound is selected from the group consisting of sodium acetate trihydrate, L-tartaric acid disodium, salt dihydrate, sodium citrate dihydrate, hydrate of an inorganic acid, hydrate of an inorganic acid salt, sodium tetraborate decahydrate, sodium hydrogenphosphate heptahydrate, sodium phosphate, dodecahydrate, amylose, starch-based hydrophilic polymers, cellulose-based hydrophilic polymers, and combinations thereof.

90. (New) A method of enhancing the permeability of a proppant matrix comprising the step of introducing a plurality of voids into the proppant matrix by a degradation of a degradable composite material within the proppant matrix.

91. (New) The method of claim 90 wherein the proppant matrix comprises a material selected from the group consisting of sand, walnut hulls, man-made proppant particulates, and combinations thereof.

92. (New) The method of claim 90 wherein the proppant matrix comprises a curable resin, a tackifying agent, or both.

93. (New) The method of claim 92 wherein the curable resin is selected from the group consisting of epoxies, furans, phenolics, furfuryl aldehydes, furfuryl alcohols, and combinations thereof.

94. (New) The method of claim 90 wherein the proppant matrix comprises interlocking proppant particulates.

95. (New) The method of claim 90 wherein the degradable composite material further comprises a degradable polymer or a dehydrated salt.

96. (New) The method of claim 95 wherein the degradable polymer is selected from the group consisting of polysaccharides, chitins, chitosans, proteins, aliphatic polyesters, poly(lactides), poly(glycolides), poly(ε-caprolactones), poly(hydroxybutyrates), polyanhydrides, aliphatic polycarbonates, poly(amino acids), poly(ethylene oxides), polyphosphazenes, and combinations thereof.

97. (New) The method of claim 96 wherein the dehydrated salt is selected from the group consisting of anhydrous sodium tetraborate, anhydrous boric acid, and combinations thereof.

98. (New) The method of claim 90 wherein the degradable composite material further comprises poly(lactic acid) and a compound chosen from the group consisting of sodium borate and boric oxide.

99. (New) The method of claim 90 wherein the degradable composite material further comprises a stereoisomer of a poly(lactide).

100. (New) The method of claim 90 wherein the proppant matrix comprises a poly(lactic acid) degradable material and bauxite proppant particulates, the bauxite proppant particulates being at least partially coated with a curable epoxy resin.

101. (New) The method of claim 90 wherein the degradable material is present in the proppant matrix in an amount sufficient to create a desirable number of voids in the proppant matrix.

102. (New) The method of claim 90 wherein the degradable composite material is present in the proppant matrix in an amount of about 0.1% to about 30% by weight of the proppant matrix.

103. (New) The method of claim 90 wherein the degradable composite material comprises particles having a rod-like shape.

104. (New) The method of claim 90 wherein at least a portion of the voids in the proppant matrix are channel-like in shape.

105. (New) The method of claim 90 wherein the proppant matrix has a conductivity equal to or greater than 4500 darcies at a pressure of about 2000 psi.

106. (New) The method of claim 90 wherein the proppant matrix has a conductivity equal to or greater than 4500 darcies at a pressure of about 4000 psi.

107. (New) The method of claim 90 wherein the proppant matrix has a conductivity equal to or greater than 4000 darcies at a pressure of about 6000 psi.